dimensional exemplary structures described but cover all relevant memory structures within the spirit and scope of the disclosure as described herein and as understood by one of skill in the art. The illustrations of the embodiments described herein are intended to provide a general understanding of the various embodiments. Other embodiments may be utilized and derived from the disclosure, such that structural and logical substitutions and changes may be made without departing from the scope of the disclosure. This disclosure is intended to cover any and all subsequent adaptations or variations of various embodiments. Those of skill in the art will recognize that such modifications are within the scope of the present disclosure.

[0101] The above-disclosed subject matter is to be considered illustrative, and not restrictive, and the appended claims are intended to cover all such modifications, enhancements, and other embodiments, that fall within the scope of the present disclosure. Thus, to the maximum extent allowed by law, the scope of the present invention is to be determined by the broadest permissible interpretation of the following claims and their equivalents, and shall not be restricted or limited by the foregoing detailed description.

What is claimed is:

1. An apparatus comprising:
a non-volatile memory; and
a memory controller coupled to the non-volatile memory and configured (a) to receive information of an application of a device, the information indicating a device battery charging threshold, and (b) to store the information in the non-volatile memory to be accessible to a controller of a device accessory,
wherein accessibility of the information to the controller of the device accessory enables determination of whether to initiate charging of the device from a battery of the device accessory based on the device battery charging threshold while the application is not executing at the device.

2. The apparatus of claim 1, wherein the information further indicates a second device battery charging threshold.

3. The apparatus of claim 2, wherein accessibility of the information to the controller of the device accessory further enables determination of whether to disable charging of the device from the battery of the device accessory based on the second device battery charging threshold.

4. The apparatus of claim 2, wherein the device battery charging threshold corresponds to a first voltage, and wherein the second device battery charging threshold corresponds to a second voltage.

5. The apparatus of claim 2, wherein the device battery charging threshold corresponds to a first ratio of a first available charge of a device battery of the device to a battery capacity of the device battery, and wherein the second device battery charging threshold corresponds to a second ratio of a second available charge of the device battery to the battery capacity.

6. An apparatus comprising:
a first interface of an accessory of a wireless device, the first interface configured to communicate with the wireless device using a wired communication technique;
a second interface of the accessory, the second interface configured to communicate with the wireless device using a wireless communication technique;
a data storage device of the accessory; and

a controller of the accessory, the controller coupled to the first interface, to the second interface, and to the data storage device, the controller configured to activate the first interface in response to a message received via the second interface.

7. The apparatus of claim 6, wherein one or more of the first interface or the second interface is further configured to receive a first command to operate the data storage device according to a first mode and a second command to operate the data storage device according to a second mode.

8. The apparatus of claim 7, wherein the second mode is associated with a higher power consumption of the data storage device as compared to the first mode.

9. The apparatus of claim 6, wherein the controller is further configured to activate the first interface by powering up the first interface.

10. The apparatus of claim 6, wherein the accessory includes a smart case configured to receive the wireless device.

11. The apparatus of claim 6, wherein the accessory is configured to receive power from a battery, and wherein the first interface is configured to provide a supply voltage to charge the wireless device.

12. The apparatus of claim 11, wherein the accessory is further configured to deactivate the first interface in response to a first indication of a charge level of the wireless device exceeding a first threshold.

13. The apparatus of claim 12, wherein the accessory is further configured to deactivate the first interface by removing power from the first interface.

14. The apparatus of claim 12, wherein the second interface is configured to receive the message from the wireless device while the first interface is powered down or in a sleep mode.

15. The apparatus of claim 12, wherein the controller is further configured to cause the first interface to provide the supply voltage to the wireless device in response to a second indication of the charge level of the wireless device being less than a second threshold.

16. The apparatus of claim 15, wherein the controller is configured to poll the wireless device to obtain the one or more of the first indication or the second indication.

17. The apparatus of claim 15, wherein one or more of the first interface or the second interface is further configured to receive information from the wireless device, the information specifying one or more of the first threshold or the second threshold.

18. The apparatus of claim 17, wherein the controller is further configured to initiate storage of the information at the data storage device.

19. The apparatus of claim 15, wherein the first threshold and the second threshold are default parameters associated with the accessory.

20. A method comprising:
in a case that is mechanically connected to a wireless device, the case including a battery and a data storage device that contains a charging threshold, performing:
using a communication technique, receiving an indication from the wireless device of a charge level of the wireless device; and
in response to the indication of the charge level being less than the charging threshold, providing a voltage to the wireless device using the battery.